

SYC-101US

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REMARKS

Applicant thanks the Examiner for the telephone interview on April 8, 2002. As requested during the interview, claim 1 is amended to more clearly state the existing claim elements. This amendment only provides alternate wording for the claims, the scope of the twice amended claim is the same as that of the amended claim.

One amendment to the claim requires the disk drive to include a "movable disk storage medium." This amendment does not change the scope of the claim because one of ordinary skill in the art would understand that a disk drive includes a movable storage medium. This is because, a "movable" disk storage medium is an inherent part of a disk drive. Applicant submits a copy of the definition of "disk drive" from a book entitled *Vocabulary for Data Processing, Telecommunications and Office Systems*, seventh edition, 1981, published by International Business Machines Corp. In this definition, a "disk drive" is "(1) a mechanism for moving a disk pack or magnetic disk and controlling its movements. (2) Deprecated term for magnetic disk unit." Thus, the "movable disk storage medium" of twice amended claim 1 is inherent in the "disk storage medium" of the amended claim 1. Also enclosed is a copy of the definition of "disk drive" from the *Microsoft Computer Dictionary*, fourth edition, 1999, Microsoft Press.

The other amendment changes "memory" to "solid state electronic memory" in three places. This amendment is also only clarifying. The use of the word "memory" in the amended claim referred back to the "solid state electronic memory" because the word memory was first used in the third clause of claim 1 in the phrase "electronic circuitry operatively coupled to the disk drive and memory." In this phrase, the definite article "the" modifies both "disk drive" and "memory." Thus, the term "memory" as it was used already referred to the "solid state electronic memory."

Claims 1-14 were rejected under 35 U.S.C. § 102(e) as being anticipated by Ozawa et al. (hereinafter "Ozawa"), Daberko et al. (hereinafter "Daberko") or Lee et al. (hereinafter "Lee"). Claims 1-14 were also rejected under 35 U.S.C. § 102(b) as being anticipated by Norris et al. (hereinafter "Norris") or Goldberg et al. (hereinafter "Goldberg"). These grounds for rejection are overcome by the amendments to claim

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1. In particular, none of the cited references discloses or suggests one or more of the following elements of amended claim 1:

a disk drive including a disk storage medium for storing audio information;

a solid state electronic memory for holding at least a portion of the audio information for use in active playback and recording; and

electronic circuitry operatively coupled to the disk drive and memory, the electronic circuitry being configured to selectively transfer audio information between the disk drive and the memory and then to place the disk drive in a locked state and being configured for playback of the audio information from the memory.

The amended claim 1 has the same scope as the previous claim, limitations in the claim were moved from the solid state electronic memory to the electronic circuitry in order to improve the readability of the claim.

Ozawa concerns a portable audio transmission recording and reproducing system that includes a disk drive (45 in Fig. 7 and 72 in Fig. 8) and an optional card 71. The card (71 in Fig. 7 and 74 in Fig. 8), however, is not a memory card. Instead, it is an auxiliary processor that may include an audio/video encoder/decoder, a fax transmission card, a wireless transmission card, a pager card, a navigation card, or a wire transmission card (see column 7, lines 22-23 and column 8, lines 45-60). Ozawa does not disclose or suggest the use of a solid state electronic memory which holds audio information or circuitry that is configured to transfer the audio information from the disk drive to the memory. Furthermore, Ozawa does not disclose or suggest circuitry configured to transfer data from the disk drive to a memory card or circuitry configured to lock the disk drive.

Daberko does not disclose or suggest the use of a disk drive to hold audio information. Daberko discloses only the use of a flash memory that is used to transfer data from an external source to the internal SRAM for playback. (see column 10, lines 38-52).

Lee also does not disclose or suggest the use of a disk drive. Indeed, Lee teaches away from the use of a disk drive. (See column 5, lines 53-59).

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Similarly, Goldberg does not disclose or suggest the use of a disk drive and also teaches away from the use of such a device in a portable audio player. (See column 1, lines 12-16).

Norris does not disclose or suggest the use of a disk drive and also teaches away from including a disk drive in a portable audio player. (See column 1, lines 58-63).

Because none of these references (i.e. Daberko, Lee, Goldberg and Norris) discloses or suggests the use of a disk drive, they can not disclose or suggest circuitry configured to transfer data from the disk drive to a memory card or circuitry configured to lock the disk drive.

Accordingly, claim 1 is not subject to rejection under 35 U.S.C. §§ 102 (e) or 102(b) in view of Ozawa, Daberko, Lee, Goldberg or Norris. Claims 2-14 depend from claim 1 and are not subject to rejection under 35 U.S.C. §§ 102(e) or 102(b) for at least the same reasons as claim 1.

In view of the foregoing amendments and remarks and the substitute specification submitted herewith, Applicant requests that the examiner reconsider and withdraw the rejection of claims 1-14.

Respectfully Submitted,

  
Kenneth N. Nigon, Reg. No. 31,549  
Attorney for Applicant

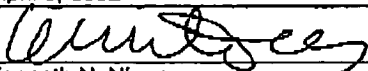
Dated: April 8, 2002

Suite 301  
One Westlakes, Berwyn  
P.O. Box 980  
Valley Forge, PA 19482-0980  
(610) 407-0700

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Kenneth N. Nigon

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## VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

- 1                   1.     (Twice Amended) A portable, hand-held audio playback unit,  
2     comprising:  
3                   a disk drive including a movable disk storage medium for storing audio  
4     information;  
5                   a solid state electronic memory for holding at least a portion of the audio  
6     information for use in active playback and recording; and  
7                   electronic circuitry operatively coupled to the disk drive and the solid  
8     state electronic memory, the electronic circuitry being configured to selectively transfer  
9     audio information between the disk drive and the solid state electronic memory and  
10    then to place the disk drive in a locked state and being configured for playback of the  
11    audio information from the solid state electronic memory.

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**SAVE**

***vocabulary  
for Data Processing,  
Telecommunications,  
and Office Systems***

**Seventh Edition (July 1981)**

This is a major revision of, and obsoletes, GC20-1699-5. The glossary has been expanded to include changes and addenda from:

- The *CCITT Sixth Plenary Assembly Orange Book, Terms and Definitions*, published by the International Telecommunication Union, Geneva, 1978.
- The *ISO Vocabulary of Office Machines*, published by the International Standards Organization, including working papers and draft proposals developed by subcommittees of ISO Technical Committee 95.
- The *ISO Vocabulary of Data Processing*, published by the International Standards Organization, including working papers and draft proposals developed by ISO Technical Committee 97, Subcommittee 1.
- New and revised terms and definitions from Systems Network Architecture, ACF/TCAM, ACF/VTAM, the 8100 Information System, Series/1, the 3600 Finance Communication System, the 3650 Programmable Store System, and other IBM sources.
- Reader's Comments Forms.

Changes are made periodically to the information herein; before using this publication in connection with the operation of IBM systems, consult the latest appropriate IBM bibliography, such as the *IBM System/370 and 4300 Processors Bibliography*, GC20-0001, for the editions that are applicable and current.

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end of a subscriber line or trunk to indicate at the other end that the established connection is to be disconnected.

**disconnect timeout.** An indication that a station has gone on-hook.

**discontiguous segment.** In VM/370, a 64K segment of storage that was previously loaded and saved and assigned a unique name. The segment (or segments) can be shared among virtual machines if it contains reentrant code. Discontiguous segments used with CMS must be loaded into storage at locations above a user's CMS virtual machine, and are attached when needed and detached when no longer needed.

**discrete.** (1) Pertaining to data in the form of distinct elements such as characters, or to physical quantities having distinctly recognizable values. (2) Contrast with analog.

\* **discrete data.** (ISO) Data represented by characters.

\* **discrete programming.** Synonym for integer programming(2).

\* **discrete representation.** (ISO) A representation of data by characters, each character or a group of characters designating one of a number of alternatives.

**discretionary hyphen.** (TC95) In word processing, a hyphen inserted by an operator to divide a word when there is insufficient space to produce the whole of that word at the end of a line. Synonymous with syllable hyphen. See also required hyphen.

\* **discrimination instruction.** (ISO) An instruction of the class of instructions that comprises branch instructions and conditional jump instructions.

\* **disjunction.** (1) (ISO) The boolean operation whose result has the boolean value 0 if and only if each operand has the boolean value 0. Synonymous with inclusive-OR operation, logical add, OR operation. (2) Contrast with nondisjunction.

**disk.** (1) Loosely, a magnetic disk unit. (2) See integrated disk, magnetic disk.

**disk adapter.** In 8100, a hardware feature that is required to transfer data and commands between the processor and a disk unit in an 8101 Storage and

Input/Output Unit, an 8130 Processor, or an 8140 Processor.

**disk allocation table (DAT).** In the 3650 Retail Store System, a data area, built by the creation facilities program (CFP), that contains an entry for each file needing space to be allocated on the store controller's disk storage.

**disk drive.** (1) (ISO) A mechanism for moving a disk pack or a magnetic disk and controlling its movements. (2) Deprecated term for magnetic disk unit.

**diskette.** A thin, flexible magnetic disk and a semi-rigid protective jacket, in which the disk is permanently enclosed. See daily initialization diskette, diagnostic diskette, formatted diskette, installation diskette, unformatted diskette. Synonymous with flexible disk.

**diskette 1.** Any diskette that is the medium used to record single-density information on one side.

**diskette 2.** Any diskette that is the medium used to record single-density information on both sides.

**diskette 2D.** Any diskette that is the physical medium used to record double-density information on both sides.

**diskette 2D drive.** In the 8100 Information System, a diskette drive that can read and write double-density information on both sides of an IBM diskette 2D or equivalent, and single-density information on one side of an IBM diskette 1 or equivalent.

**diskette drawer.** In System/32, the compartment in which the diskette is inserted when it is to be processed by the system.

**diskette drive.** See diskette storage drive.

**diskette-formatted tape.** A tape that is formatted so that it can be read by a data converter unit, which transfers the data written on it to a diskette.

**diskette-only feature.** A special feature or a specify feature that, through macro instructions or micro instructions on diskette, either: (1) activates, suppresses, or adapts product application functions; or (2) simulates functions to enhance the capability, storage capacity, or performance of the product. For example, a feature on diskette that enables a

**magnetic card storage.** (TC97) A magnetic storage in which data are stored by magnetic recording on the surface of thin flexible cards.

\* **magnetic cell.** (ISO) A storage cell in which different patterns of magnetization, are used to represent characters. Synonymous with static magnetic cell.

\* **magnetic core.** (1) (ISO) A piece of magnetic material, usually toroidal in shape, used for storage. (2) A configuration of magnetic material that is, or is intended to be, placed in a spatial relationship to current-carrying conductors and whose magnetic properties are essential to its use. It may be used to concentrate an induced magnetic field as in a transformer induction coil, or armature, to retain a magnetic polarization for the purpose of storing data, or for its nonlinear properties as in a logic element. It may be made of such material as iron, iron oxide, or ferrite and in such shapes as wires, tapes, toroids, rods, or thin film.

\* **magnetic core storage.** (ISO) A magnetic storage in which data are stored by the selective polarization of magnetic cores.

\* **magnetic delay line.** A delay line whose operation is based on the time of propagation of magnetic waves.

**magnetic disk.** (1) (TC97) A flat circular plate with a magnetizable surface layer on which data can be stored by magnetic recording. (2) (TC95) In word processing, a recording medium in the form of a flat circular plate on which magnetic recordings can be made on either or both sides. (3) See also diskette.

**magnetic disk storage.** (ISO) A magnetic storage in which data are stored by magnetic recording on the flat surfaces of one or more disks that rotate in use.

**magnetic disk unit.** (ISO) A device containing a disk drive, magnetic heads, and associated controls.

**magnetic drum.** (TC97) A right circular cylinder with a magnetizable surface layer on which data can be stored by magnetic recording.

**magnetic drum storage.** (TC97) A magnetic storage in which data are stored by magnetic recording on the curved surface of a cylinder that rotates in use.

**magnetic drum unit.** (TC97) A device containing a

drum drive, magnetic heads, and associated controls.

**magnetic hand scanner.** A hand-held device that reads precoded information from a magnetic stripe.

**magnetic head.** (1) (TC97) An electromagnet that can perform one or more functions of reading, writing, and erasing data on a magnetic data medium. (2) See also read head, read/write head, write head, pre-read head.

\* **magnetic hysteresis loop.** A closed curve showing the relation between the magnetization force and the induction of magnetization in a magnetic substance when the magnetized field (force) is carried through a complete cycle.

\* **magnetic ink.** An ink that contains particles of a magnetic substance whose presence can be detected by magnetic sensors.

\* **magnetic ink character recognition (MICR).** Character recognition of characters printed with ink that contains particles of a magnetic material. Contrast with optical character recognition.

\* **magnetic recording.** (ISO) A technique of storing data by selectively magnetizing portions of a magnetizable material.

**magnetic sheet.** (TC95) In word processing, a recording medium in the form of a broad rectangular strip on which magnetic recordings can be made on either or both sides.

**magnetic slot reader.** A device that reads precoded information from a magnetic stripe as it passes through a slot in the reader.

\* **magnetic storage.** (ISO) A storage device that uses the magnetic properties of certain materials.

**magnetic stripe.** (1) A strip of magnetic material on which data, usually identification information, can be recorded and from which the data can be read. (2) In PSS, the magnetic material, similar to recording tape, on merchandise tickets, credit cards, and employee badges. Information is recorded on the stripe for later reading by the wand attached to the point of sale terminal.

**magnetic tape.** (1) \* A tape of magnetic material used as the constituent in some forms of magnetic cores. (2) (TC97) A tape with a magnetizable surface layer on which data can be stored by

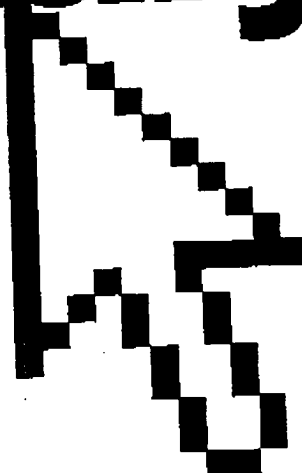


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# Computer Dictionary

Fourth  
Edition



## disk cartridge

information read from disk. A disk cache does not hold entire files, as does a RAM disk (a portion of memory that acts as if it were a disk drive). Instead, a disk cache is used to hold information that either has recently been requested from disk or has previously been written to disk. If the required information remains in a disk cache, access time is considerably faster than if the program must wait for the disk drive mechanism to fetch the information from disk. *See also cache. Compare disk buffer.*

**disk cartridge** *n.* A removable disk enclosed in a protective case. A disk cartridge can be used by certain types of hard disk drives and related devices, such as the external data storage units known as Bernoulli boxes.

**disk controller** *n.* A special-purpose chip and associated circuitry that directs and controls reading from and writing to a computer's disk drive. A disk controller handles such tasks as positioning the read/write head, mediating between the drive and the microprocessor, and controlling the transfer of information to and from memory. Disk controllers are used with floppy disk drives and hard disks and can either be built into the system or be part of a card that plugs into an expansion slot.

**disk copy** *n.* The process of duplicating a source disk's data and the data's organizational structure onto a target disk. *See also backup.*

**disk crash** *n.* The failure of a disk drive. *See also crash.*

**disk directory** *n.* An index of the files on a disk, analogous to a card catalog. A disk directory includes information about the files, such as their names, sizes, dates of creation, and physical locations on the disk. *See also directory.*

**disk drive** *n.* An electromechanical device that reads from and writes to disks. The main components of a disk drive include a spindle on which the disk is mounted, a drive motor that spins the disk when the drive is in operation, one or more read/write heads, a second motor that positions the read/write head(s) over the disk, and controller circuitry that synchronizes read/write activities and transfers information to and from the computer. Two types of disk drives are in common use: floppy disk drives and hard disk drives. Floppy disk drives are designed to accept re-

movable disks in either 5.25-inch or 3.5-inch format; hard disk drives are faster, high-capacity storage units that are completely enclosed in a protective case.

**disk driver** *n.* A device driver that is added to a system to support a specific manufacturer's disk device. *See also device driver.*

**disk duplexing** *n.* *See* disk mirroring.

**disk envelope** *n.* The paper container that holds a 5.25-inch floppy disk and its attached jacket. The disk envelope protects exposed surfaces of the disk from dust and other foreign material that can scratch and otherwise damage the surface, resulting in the loss of recorded data. *See also disk jacket.*

**diskette** *n.* *See* floppy disk.

**disk interface** *n.* 1. The circuitry that connects a disk drive to a computer system. 2. A standard for connecting disk drives and computers. The ST506 standard for connecting hard disks to computers is a disk interface standard.

**disk jacket** *n.* The protective plastic sheath that covers a floppy disk.

**diskless workstation** *n.* A station on a computer network that is not equipped with a disk drive and that uses files stored in a file server. *See also file server.*

**disk memory** *n.* *See* virtual memory.

**disk mirroring** *n.* A technique in which all or part of a hard disk is duplicated onto one or more other hard disks, each of which ideally is attached to its own controller. With disk mirroring, any change made to the original disk is simultaneously made to the other disks, so that if the original disk becomes damaged or corrupted, the mirror disks will contain a current, undamaged collection of the data from the original disk. *Also called* disk duplexing. *See also* fault tolerance.

**disk operating system** *n.* *See* DOS.

**disk pack** *n.* A collection of disks in a protective container. Used primarily with minicomputers and mainframe computers, a disk pack is a removable medium, generally a stack of 14-inch disks in a plastic housing.

**disk partition** *n.* A logical compartment on a physical disk drive. A single disk might have two or more logical disk partitions, each of which would be referenced with a different disk drive name. Multiple partitions are divided into a primary (boot) partition and one or more extended partitions.

## disk partition

## disk server

**disk server** *n.* A node that acts as a remote disk server. Unlike a file server, a disk server functions as a disk server function; users can read and divided into sections; appears to be a separate

**disk striping** *n.* The same-size disk partitions (from 2 to 32 disks) virtual "stripe" across multiple I/O operations concurrently, thus also disk striping

**disk striping with parity** *n.* A technique for maintaining parity information if one disk partition is re-created using the remaining partition striping, fault tolerance

**disk unit** *n.* A disk drive unit. In some cases, the set of routines for central processing

**dispatch table** *n.* A table for a certain class of handlers (routines that contain signals or control vector table, jump table, interrupt handler.

**disperse** *vb.* To break up or scatter—for example, to scatter several sets of data fields in records) so that one place in the overall

**dispersion** *n.* The distribution of data in a distributed system; data is stored at different devices.

**display** *n.* The visual output which is commonly portable and notebook-sized; an LCD-based